Drive Towards Circular Land Use Management

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European background

Every year in the EU more than 1000 km² of undeveloped land is appropriated for housing, roads, industry, and recreation.

EEA has estimated that there are as many as three million brownfield sites across Europe.

No common legislation at European level for the sustainable use of soil resources has been adopted.
Circular land use management

Level of land sealing and level of built up areas in selected EU countries

Percentage increase

116
114
112
110
108
106
104
102
100
98


- Built-up (statistical data)
- Total built-up (CLC)
- Population
- Economic sites
- Residential sites

Total soil sealing, 2006
% soil sealing per area km²
- < 1 %
- 1 - 2 %
- 2 - 3 %
- 3 - 4 %
- > 5 %
- Outside scope of analysis
CircUse project background

Key urban issues:
- land consumption,
- urban sprawl,
- brownfields,
- increase of urbanized areas not proportionally to population growth

Negative consequences:
- higher demand on energy consumption,
- increased cost of development externalities resulting in reduction of competitiveness of cities,
- diminishing of soil environmental services capacity resulting in global climate problems
CircUse answer

Project CircUse focused on pragmatic approaches supporting urbanised land recycling.

The idea is to make land a renewable resource.
CircUse Goal

Working out of transnational model of circular land use management consistent with sustainable development requirements: stakeholders’ involvement an important element in the model implementation.

Within the project for 6 pilot sites in 6 countries a climate friendly land use concepts in coherence with new instruments and pilot actions have been developed, where a transnational applicable solutions would enhance counteracting urban sprawl and creation of dispersed land use patterns.
CircUse concept

Circular land use management represents an integrative policy and governance approach, which presupposes a changed land use philosophy with regard to land utilization. This modified land use philosophy can be expressed with the slogan:

"avoid – recycle – compensate"

Similar approach as to recycling of other valuable resources (paper, metal, glass est.) is applied.
The CircUse process is visualized in this figure, showing land use as a cycle with three major phases:

a. Zoning new “Greenfields”

b. Rejection of land not suitable for subsequent use

c. Activating land potentials brownfields, empty buildings gaps between buildings and vacant land urban renewal and redevelopment sites sites undergoing planning

The end and the beginning of each phase are crucial decision points.
CircUse Outputs

- Integrated Strategy of Circular Flow Land Use Management
- A position paper on land management practice
- Educational module focused on city and regional stakeholders
- Educational module focused on secondary school children
- Action plans supporting implementation of strategy
- Inventory databases of land suitable for development activities (vacant land, brownfields, gaps, greenfield sites est.)
- Circular land use management maps
- Institutional models for land use management governance
- Pilot projects
CircUse Strategy Theses

1. Common problems faced by a common strategy of circular flow land use management
2. Setting of quantified and qualified targets is a necessary requirement
3. Comprehensive definition of land types is necessary
4. Information instruments and data management is one of the key activities
5. Coordinated efforts of the various public and private stakeholders is necessary
6. Integrated course of action which encompasses a package of instruments
7. Action plans need policy mix, stakeholder institutions, financing sources
8. New forms of organization need to be implemented
9. Permanent knowledge acquisition and awareness raising
Regional Action Plan

- A regional Action Plan is a process designed to cohere regional departments, towns, regional institutions and land owners to participate on improving urbanised land use sustainability in the region.

  - Action Plan:
    - --sets up a common vision, goals, priorities, actions and activities
    - --identifies the leaders of the planned activities and allocates responsibilities
    - --sets up an implementation program
    - --estimates cost of individual actions and activities
    - --identifies funding sources for these activities
Objective: to focus onto a support for the sustainable land use in the Ústí region and for setting up urbanised land use management on a regional scale. This AP was structured to help the departments and stakeholders communication, cooperation and cohesion, in order that they can concentrate on achieving their agreed goals.
Action Plan for Asti (Italy)

Objectives:

- Reduction of environmental impact
- Blocking exploitation of green areas
- Minimise water demand and reduce waste production, minimise energy demand and produce renewable energy on the site,
- For the political part, while promoting renewal the administration must integrate the reuse of brownfield sites into urban development, for a holistic strategic vision.
Action Plan for Saxony (Germany)

Objectives definition

New Saxonian development plan acc. to the circular land use management

Indicators and targets on land consumption based on reg. dev. plan acc. to the circular land use management

Recommendations of integration into the regional development plan land cycle aspects

Development of data management tool

Stakeholders awareness raising by workshops
Action Plan for Trnava (Slovakia)

The vision is the development of functioning, efficient and flexible cooperation structure and interlinks between different aspects of micro-regional development, different actors and interests in one interlinked strategy as a reaction to existing problems with brownfields areas, abandoned buildings and growing requirements concerning new capacities of public services and land for private investments.
Action Plan for Voitsberg (Austria)

Reduction of land consumption and soil sealing and providing a long-term concept for land management in the Region of Voitsberg. The future use of large derelict mining areas will be analysed and the potential to establish pilot biomass plantations shall be explored and tested.
Action Plan for Piekary (Poland)

- analysis of ground contamination
- concepts of the possible land management,
- technical projects,
- marketing operations,
- supporting of investors’ activities,
- investment activities (realization of the pilot project regarding greenfields development),
- social communication
CircUse Pilot Investment

The investment is located in Brzeziny – the district of Piekary Śląskie in Poland. It consists in redevelopment of a selected post-industrial site of 14 ha. It includes:

- Reuse of postindustrial areas through making it suitable for business activity (production, storage, recycling connected activity)
- Establishing green zone separating industrial areas from residential complexes, what will not only create a natural buffer, but also increase recreational value of the area.
- Restoration of the urban areas, in particular rising the standard of residential and shop-service buildings, improve esthetics of public areas, especially in the central part of historical value.
- Taking actions against unemployment and social detachment of the locals.
Investment in Piekary
Renaturation in Piekary (plantation of birch)
Concept of institutional solutions serving to management of circular land use was one of the most important outputs of the project. Two different approaches have been taken:

1. Based on the existing institution, to which additional tasks and competencies have been transferred – it is the case of Industrial Park – Ekopark in Piekary or the case of an institutional solution for the Czech regions.

2. Establishing new agency especially for management of circular land use. This one was created in the region of Voitsberg in Austria.

Both solutions of institutions acting as local operators for management of circular land use as implemented structures can serve as a good practice for other European towns and regions.
CircUse final conference will take place in Katowice, Poland on 27-28 May 2013

www.circuse.eu